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ABSTRACT

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Keywords-component; formatting; style; styling; insert

I. INTRODUCTION

All standard paper components have been specified for three reasons: (1) ease of use when formatting individual papers, (2) automatic compliance to electronic requirements that facilitate the concurrent or later production of electronic products, and (3) conformity of style. Margins, column widths, line spacing, and type styles are built-in; examples of the type styles are provided throughout this document. All styles necessary for formatting a paper for ETASR have a ETASR related style name. For example: the "ETASR body text" style is used for this paragraph. Some components, such as multi-leveled equations, graphics, and tables are not prescribed, although the various table text styles are provided. The author will need to create these components, incorporating the applicable criteria that follow. Please note that although minor formatting corrections will be done by ETASR during the copyediting of the paper, largely unformatted documents will be declined right after submission. Submitting a properly formatted document is not only a sign of respect for a journal and its rules, it also helps journals to avoid applying processing charges, thus benefiting all authors.

II. EASE OF USE

This template should be used to format your paper and style the text. All margins, column widths, line spaces, and text fonts are prescribed; please do not alter them. Do not paste formatted text in this file: it will probably cause the loss of formation. If you do, make sure to re-format the text correctly and to apply the correct ETASR style where appropriate. Also always make sure that you use the correct column sizes (8.9 cm width with 0.63 cm spacing), the correct margins (top: 1.9 cm, bottom: 2.54 cm, left: 1.57 cm and right: 1.57 cm) and paper size (Letter size, width: 21.59 cm and height: 27.94 cm). Do not change font size or line spacing to squeeze more text into a limited number of pages.

III. REGARDING THE CONTENT

- The current state of the research field should be reviewed and key publications should be cited within the introduction. There should not be another separate section for Literature Review. All claims or facts mentioned in the introduction should be supported by references.
- The conclusion section should place the work in context and highlight its importance, novelty and contribution.

- References should be numbered in order of appearance.
- Footnotes should not be used. Links and URLs should not be included in the text. Instead they should be included in the reference list and cited in the text.
- The structure of the document should help the reader easily separate the background/literature review part from the novel part.
- The focus and largest part of the manuscript should be on the authors' own work.
- The authors should avoid stating extended information for previously known methods, algorithms, techniques etc. A brief description of them may be given (principles, key characteristics etc) but all further information should be provided via references. This also includes the math background (equations, proofs etc). If you need to include known equations make sure that these are the absolutely essential ones.

IV. PREPARE YOUR PAPER BEFORE STYLING

Do not use hard tabs and do not use empty rows between paragraphs. Do not add any kind of pagination anywhere in the paper. Do not number text heads, the template will do that for you. Please take note of the following items when proofreading spelling and grammar:

A. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Well known abbreviations such as SI, mm, AC, RMS etc do not have to be defined. Do not use abbreviations in the title or heads unless they are unavoidable.

B. Units

- Use SI (MKS) as primary units. English units may be used as secondary units (in parentheses). An exception would be the use of English units as identifiers in trade, such as "3.5-inch disk drive."
- Do not mix complete spellings and abbreviations of units. Spell out units when they appear in text: ". . . a few henries", not ". . . a few H".
- Always write the zero before decimal points.
- Use "cm^3" or "cm3" but not "cc". Make sure that you use the correct symbols for thousands and decimals (i.e. one thousand is 1,000.00, not 1.000,00).

C. Equations

The equations are an exception to the prescribed specifications of this template.

- Do not insert equations as images.
- Always insert them in-line with text (never have them float over text).
- Number equations consecutively. Equation numbers, within parentheses, are to position to the right of the equations.
- The best solution would be to use the Equation Editor (1) or Mathtype (2) as below:

$$\alpha + \beta = \chi \quad (1)$$

$$\alpha + \beta = \chi \quad (2)$$

- Use the same symbol in the text as in the equation. Do not use e.g. Xm or X_m in the text, and X_m or X_m in the equation.
- Punctuate equations with commas or periods when they are part of a sentence.
- Be sure that the symbols in your equation have been defined before or immediately following the equation. If needed, you can add a denotation table/paragraph at the beginning or the end of the manuscript.
- Use "(1)", not "Eq. (1)" or "equation (1)", except at the beginning of a sentence, e.g. "Equation (1) is . . ."

D. Some Common Mistakes

- In American English, periods and commas are written within quotation marks, "like this." Other punctuation is "outside"! For scientific writing, it was widely suggested in the past that punctuations should follow the British English style (commas and periods outside quotes) as this was considered more "internationally accepted." However, full adoption of the American English punctuation style has gained ground since and ETASR also now follows the American English punctuation style.
- The word "data" is plural, not singular.
- A parenthetical phrase or statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within the parentheses.)
- Use "whereas" instead of "while" (except if you mean that things are happening simultaneously).
- The prefix "non" is not a word; it should be joined to the word it modifies, usually without a hyphen.
- There is no period after the "et" in the Latin abbreviation "et al."
- The abbreviation "i.e." means "that is" and the abbreviation "e.g." means "for example".
- Avoid contractions: write "is not" instead of "isn't."
- You may use or not use a serial comma (or Oxford comma), but make sure that its use (or nonuse) does not create any ambiguity. If needed, change the phrasing.

V. USING THE TEMPLATE

Duplicate the template file by using the Save As command. You can either start typing or import your prepared text file, in this newly created file. Use the control+shift+s shortcut to make the style window appear.

A. Authors and Affiliations

- Use the "ETASR author" and "ETASR affiliation" styles correspondingly. If an author has more than one affiliations, then use " | " to separate them.
- You should state the full name of all co-authors. Capitalize Each Word for the given name/first name and use UPPERCASE letters for the surname/family name (will be reverted during copyediting). Write the given name first and the surname last (from left to right).
- Make sure that all authors' affiliations and all authors' emails are stated.
- Use the official English translation/title of your institution (check its web page for verification if necessary).

B. Headings & Captions

Headings, or heads, are organizational devices that guide the reader through your paper. There are two types: component heads and text heads.

- Component heads identify the different components of your paper and are not topically subordinate to each other. Examples include Acknowledgments and References. Use the "ETASR Heading 5" style for these headings.
- Use the "ETASR figure caption" style, for your Figure captions, and "ETASR table head" for your table title.
- Text heads organize the topics on a relational, hierarchical basis. If there are two or more sub-topics, the next level head should be used. Styles named ETASR Heading 1, ETASR Heading 2, ETASR Heading 3 and ETASR Heading 4 are prescribed.
- If there are not at least two sub-topics, then no subheads should be introduced.

C. Figures and Tables

1) Positioning Figures and Tables

- Figure captions should be below the figures; table heads should appear above the tables.
- Avoid placing (a), (b) etc on top of figures.
- Insert figures and tables after they are cited in the text.
- Refer to figures using "Figure 1" and to tables using "Table I" and so on.
- Figure captions cannot be part of the figure.
- Figures are ideally 300 dpi TIFF files. If this results to a large file then you should use formats such as jpg and png, but always make sure that the figure is of good quality.
- Do not use word shapes as figures, especially if the shapes are not grouped. You should extract the word shape image in an image file. You can do that in various ways. The simplest would be to create the figure in word using word shapes and then use print screen and paste in an image creating/manipulating program.

TABLE I. TABLE TYPE STYLES

Table Head	**Table Column Head**		
	Table column subhead	***Subhead***	***Subhead***
copy	More table copy		

a. Sample of a Table footnote.

Fig. 1. Example of a figure caption [justify if more than one row].

- If possible, place figures and tables at the top and bottom of columns.
- The layout o figures should be "in-line with text". Other layouts may cause figures to float on top of text or out of bounds when the file is opened using other Word versions.
- Make sure that the smaller font inside a figure is at least the same size as the figure captions fonts.
- Do not insert large images and then resize them in Word. When large images are resized in Word, the quality and readability of fonts both suffer. Instead, first resize the images outside Word (or produce them in the correct size in the first place) and then insert them into your Word file. Images should ideally be inserted at their actual size (no resizing in Word should be needed).
- Note that large figures and tables may span across both columns. This should be done however only if necessary. You should not enlarge figures to enlarge the fonts. Edit them and enlarge the fonts within them without changing their size
- As the readability of figures has proven to be a frequent point of friction between authors, reviewers and our staff, we also include a simple explanatory image that should help all parties (Figure 2)

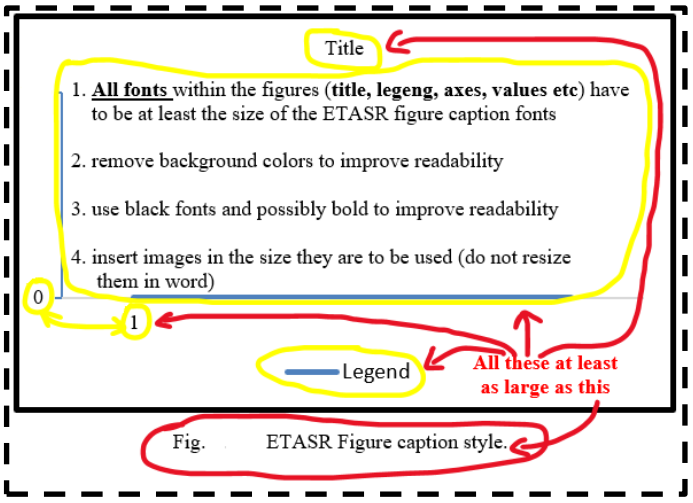
Title
1. All fonts within the figures (title, legeng, axes, values etc) have to be at least the size of the ETASR figure caption fonts
2. remove background colors to improve readability
3. use black fonts and possibly bold to improve readability
4. insert images in the size they are to be used (do not resize them in word)
0
1
Legend
All these at least as large as this
Fig. ETASR Figure caption style.

Fig. 2. A simplified example to help you check your figures.

2) Figure Labels

Use words rather than symbols or abbreviations when writing axis labels to avoid confusing the reader. If including units in the label, present them within parentheses. Do not label axes only with units.

D. Computer codes

If you want to type a computer code, then you have to use the "ETASR code" style, as shown below:

```
This is my code
```

VI. CITING REFERENCES IN TEXT

Three basic rules apply about the citation format:

1. Refer simply to the reference number e.g. use "Authors in [1]" or "it was shown that … [2]" - do not use "ref. [1]" or "reference [2]" except if at the beginning of a sentence, e.g. "Reference [1] shows … ." If you use authors' names to cite a reference in text, then use "et al." when there are three or more names. Do not use any other bibliographical data (e.g. the year etc) when citing a reference in text.
2. The sentence punctuation follows the bracket (e.g. "as shown in [3].")
3. For multiple references: include all refs in the same bracket (e.g. [1-3, 5] and not [1]-[3], [5]).

VII. ADDITIONAL CITATION RULES

Make sure that:

1. All references in your reference list are cited in the text.
2. All references in the manuscript are cited sequentially (in an increasing order and not in a random order)
3. There are no erroneous or misleading citations (e.g. citations that lead to misfitting references, multiple references cited for the same generic phrase, citing an article that uses an algorithm/technique/theory when generally referring to that algorithm/technique/theory etc)
4. There are no statements and citations that are not related to the article/topic. A citation may be correctly related to a statement, but the statement has to be related to the article and follow the logical flow of the manuscript.
5. Although citing one's own work is often necessary, e.g. when publishing the next part of an ongoing research, make sure that all self-citations are directly related to the submitted work and that you steer away from any concern related to self-promotion or manipulation of citation metrics.

You may use the above "ETASR numbered list" style, if you wish to have a numbered list in your paper.

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If you use a publicly available dataset, make sure that you follow the conditions set by the dataset owner for re-using the dataset. In other words: just because a dataset is available, that does not mean that you can use it without respecting the respected license/conditions. Owners of publicly available datasets usually request that specific articles (the one or ones presenting the dataset) are cited when their dataset is used. Note that although morally wrong and possibly illegal, it is however possible that the original dataset has been re-uploaded by other users (not the owners) in repositories or sites without retaining the initial copyright notice or conditions for re-use set by the owners. This is not an excuse however for you as an author to use the dataset without respecting the conditions set by the initial owner.

To avoid all such issues, we request our authors to cite at least two references for each dataset: one that refers to the source and one (or more) that refers to the article or articles that the dataset owner requests to be cited when the dataset is used. You can write e.g. "Dataset X […] available from […]" or "Dataset available at […] and further discussed in […]".

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If you have access to a private dataset (e.g. directly from the owner), then you should discuss in the text exactly how the dataset was acquired. If you use your own dataset, then it is preferable that you upload it to a public repository and cite it in your manuscript. If this is not possible (e.g. the dataset may be confidential) you should discuss the situation in your manuscript.

IX. COMPARATIVE ANALYSIS OF RESULTS

Publishing a research work is not just about reporting your work and results. A research article has to add to previously available knowledge. It is thus advisable that you compare your approach and findings to similar works previously published to showcase the novelty of your work and its contribution to the field. Note however that this analysis has to be well founded and explained in detail and not rushed through. For example, if you compare your results with previously published results, then you should provide a brief background about how these results were acquired (e.g. dataset and techniques used etc) and discuss factors that may play a role in the comparison. If you use a publicly available dataset (especially a commonly used benchmark dataset), it is strongly advisable that you compare your results to previous works using the exact same dataset. If this is not possible, you should further discuss and explain why. If you decide to reproduce results using your dataset and techniques previously applied on other datasets, then the actual procedure should be thoroughly presented and discussed.

X. REFERENCE LIST RULES

- Make sure that you have included enough recent references to place your work in context among recent research.
- Make sure that you have included the minimum number of references from ETASR required to justify the relevance of your paper to this journal (check the submission preparation checklist at our site for the exact number).
- Use the "ETASR reference" style to format the references section. The template will number citations consecutively within brackets.
- It is widely advised that a citation tool or reference manager (e.g. Zotero, Mendeley etc) is used.
- Our citation style is available in the official Zotero Style Repository and you can add it to your available styles either from within your Reference Manager Software (e.g. Zotero, Mendeley) or you can download it directly from https://www.zotero.org/styles/engineering-technology-and-applied-science-research and add it manually to your Reference Manager Software.
- Although, freely available add-ons are provided that can be used to grab references directly from the publisher's site, these are still really buggy. Instead, you should download the citation data (in RIS format) and then import them in your reference manager software. You can then export the reference (or the whole reference list) in Word.
- Google Scholar offers a "cite" tool but its automated data harvesting is prone to errors. It is advisable to visit/use the publisher's site instead of Google Scholar.
- It is also advisable to download the RIS file for each citation to your PC and then import it in your reference manager software instead of simply copying the citation from sites that provide a "cite this as…" text. Inconsistencies and errors have been spotted in such texts even at the sites of major publishers.
- Check and if needed correct and/or populate the metadata of a reference in your reference manager software before pasting them in your list.
- The basic goals of the authors should be: (a) to provide sufficient data so that each reference may be identified, (b) keep a uniform style throughout the reference list, and (c) follow the basic styling principles.

If you use our csl style then all citation styling will be performed automatically. However, the basic rules for our reference format are quoted below.

- The authors' names are stated first, using the "A. Author" form, the title of the reference follows within quotes, the medium that included the reference (i.e. the container) follows in italics, and the rest of the bibliographical data conclude the reference. Italics are not used in case of theses and dissertations. If a DOI is available, it should be included in the end of the reference. If a DOI is available, an URL should not be included. To add an URL, simply add "[Online]. Available: " and the URL at the end of the reference. A period should not be added at the end of the URL. Some minor formatting rules are also given below.
- Avoid using references that are not in English. If necessary however, then provide the official English translation –if available- for all bibliographical data (journal's title, article's title, institution in case of a thesis etc). The original language used in the citation should be mentioned in parentheses right after the title of the reference (or the publisher's name in case of a book).
- Give all authors' names; do not use "et al." except in case of an exceptionally large number of authors (seven or more).
- Papers that have not been published, even if they have been submitted for publication, should be cited as "unpublished." Papers that have been accepted for publication should be cited as "to be published."
- Avoid citing not permanently referenced internet documents/articles.
- If you include a URL, use a soft return (shift+return) to break the URL so as to avoid miss justification of the text before it. Do not add hyphens or spaces to the URL. Break an URL after /, //, before ~, -, _, ?, %, before or after =, & or @.
- Be cautious about the placing of commas (they should be inside quotes).
- Do not use abbreviations. Do not use working acronyms. For example, use "Engineering, Technology & Applied Science Research" and not "ETASR" or "ETASR- Eng. Technol. Appl. Sci. Res." or "Engineering, Technology & Applied Science Research (ETASR)" or any other combination that includes "ETASR" or any similar acronyms for other journals.
- If some of the bibliographical data stated in the basic formatting examples below are not applicable, simply omit them. For example, an editor may not exist for a certain book and there is no need to write pages for a book if the whole book is cited as a reference.
- The list below is a list of examples. In an actual article, references are not to be grouped by type (journal papers, books, conferences etc). Instead they are to be listed in the order they appear in the text (regardless their type).

ACKNOWLEDGMENT

Include sponsor acknowledgments in this section. Do not number the heading. The acknowledgment section should be placed right before the reference list.

REFERENCE LIST STYLE AND EXAMPLES

- Journal articles

[1] A. Author and B. Author, "Title of article," *Title of Journal*, vol. x, no. x, pp. xxx-xxx, Month (abbreviated), year. [in case pages are used]

[2] A. Author, B. Author, and C. Author "Title of article," *Title of Journal*, vol. x, no. x, Month (abbreviated), year, Art. no. xxx. [in case article numbers are used]

- Books

[3] A. Author, *Book Title*, xth ed. City of Publisher, (State if in the U.S.), Country: Publisher, year. [in case the whole book is cited]

[4] A. Author, "Chapter title," in *Book Title*, X. Editor, Ed., xth ed. City of Publisher, (State if in the U.S.), Country: Publisher (in Language), year, ch. x, sec. x, pp. xxx–xxx. [in case a specific part of the book (a chapter, a section etc) is cited]

- Conference articles

[5] A. Author, "Title of article," in *Name of Conf.*, Location, year, pp. xxx-xxx (omit pp. if not available). [in case of published conference papers]

[6] A. Author, "Title of article," (in Language) presented at the *Name of Conf.*, Location, Month and day(s), year, pp. xxx-xxx (omit pp. if not available). [in case of unpublished conference papers]

- Thesis-dissertation

[7] A. Author, "Title of thesis," M.S. thesis, Dept.,Univ., City of Univ., Country, year.

[8] A. Author, "Title of dissertation," Ph.D. dissertation, Dept., Univ., City of Univ., Country, year.

- Websites

[9] A. Author. "Page Title." Website Title. Web Address

- Standards

[10] *Title of Standard*, Standard number, Corporate author, location, date.

[11] *Title of Standard*, Standard number, date.

- Manuals

[12] *Title of Manual/Handbook*, x ed., Name of Co., City of Co., Abbrev. State, Country, year, pp. xxx–xxx. [in case of a hard copy manual without specific authors]

[13] A. Author. *Title of Manual/Handbook*, (year). Accessed: Date. [Online]. Available: URL [in case of an online manual with a specific author]

- Software

[14] *Title of Software*. (version or year), Publisher Name. Accessed: Date (when applicable). [Online]. Available: URL

AUTHORS PROFILE

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